### Dell™ 1909W Flat Panel Monitor User's Guide

**About Your Monitor** 

Setting Up the Monitor

Operating the Monitor

**Troubleshooting** 

**Appendix** 

## Notes, Cautions, and Warnings



**NOTE**: A NOTE indicates important information that helps you make better use of your computer.



CAUTION: A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.



WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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Model 1909Wf 1909Wb

January 2010 Rev. A02

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#### **About Your Monitor**

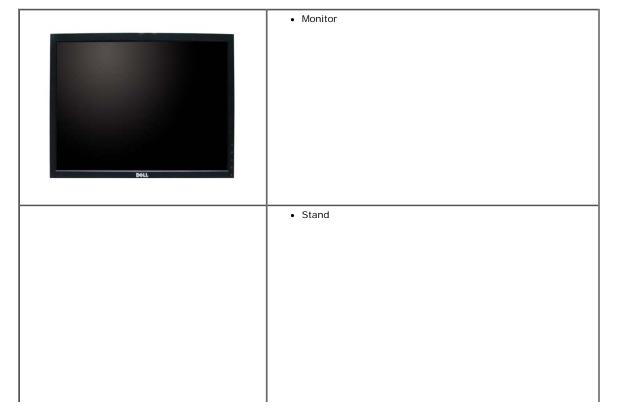
**Dell™ 1909W Flat Panel Monitor User's Guide** 

- Package Contents
- Product Features
- Identifying Parts and Controls
- Monitor Specifications
- Plug and Play Capability
- Universal Serial Bus (USB) Interface
- Maintenance Guidelines

#### **Package Contents**

Your monitor ships with the components shown below. Ensure that you have received all the components and contact Dell if something is missing.

- NOTE: Some items may be optional and may not ship with your Monitor. Some features or media may not be available in certain countries.
- NOTE: Stand and cables are not included when purchased with OptiPlex<sup>TM</sup> USFF 780/ OptiPlex<sup>TM</sup> SFF 980 AIO Stands.
- NOTE: To set up with the respective AIO stand, please refer to the respective AIO stand guide for setup instructions.











- · Drivers and Documentation media
- Quick Setup Guide
- Safety Information

#### **Product Features**

The 1909W flat panel display has an active matrix, thin-film transistor (TFT), liquid crystal display (LCD). The monitor features include:

- 19-inch (482.6 mm) viewable area display (Measured diagonally) .
- 1440x900 resolution, plus full-screen support for lower resolutions.
- Wide viewing angle to allow viewing from a sitting or standing position, or while moving from side-to-side.
- Tilt, Swivel, Vertical Extension and rotate adjustment capabilities.
- Removable pedestal and Video Electronics Standards Association (VESA) 100 mm mounting holes for flexible mounting solutions.
- Plug and play capability if supported by your system.
- On-Screen Display (OSD) adjustments for ease of set-up and screen optimization.
- Software and documentation media which includes an information file (INF), Image color Matching File (ICM), and product documentation.
- Energy Saver feature for Energy Star compliance.
- Security lock slot.
- Asset Management Capable.
- EPEAT™ GOLD compliant.

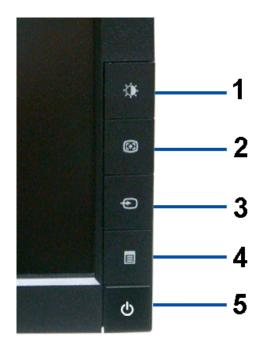
#### **Identifying Parts and Controls**

#### **Front View**



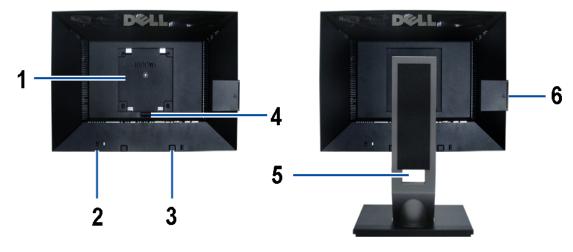
Front View

Label	Description	
1	1 Brightness & Contrast	
2	2 Automatic adjust	
3	Input source Select	
4	Menu	
5	Power (with power light indicator)	



Front panel controls

#### **Back View**



Back View with monitor stand

Label	Description	Use
1	VESA mounting holes (100mm) (Behind attached base plate)	To mount the monitor.
2	Security lock slot	To help secure your monitor.
3	Dell Soundbar mounting brackets	To attach the optional Dell Soundbar.
4	Stand Release Button	To press to release the stand.
5	Cable management slot	To organize cables by placing them through the slot.
6	label compartment	To pull out to view labels

Note: The regulatory rating label and barcode serial number label is revealed when plate is pulled out from USB compartment.

#### **Label View**



Monitor front view with pull-out card extended to reveal barcode serial number marks.



Monitor rear view with pull-out card extended to reveal regulatory marks.

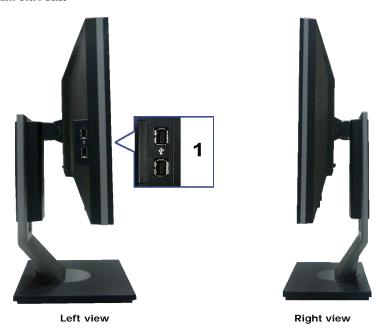


Monitor rear view with pull-out card inserted back to provide a clean back view.

Label	Description	Use
1	Barcode serial number label	To contact Dell for technical support.
2	Regulatory label	Lists the regulatory approvals.

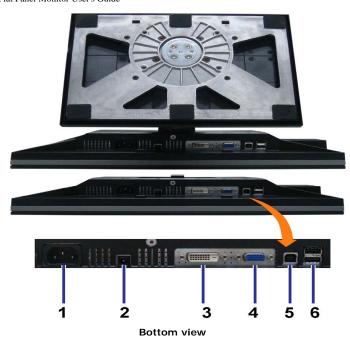
Note: The regulatory rating label and barcode serial number label is revealed when plate is pulled out from USB compartment.

#### **Side View**



	Label	Description
Γ	1	USB downstream ports

#### **Bottom View**



Label	Description	
1	AC power cord connector	
2	Dell Soundbar power connector	
3	DVI connector	
4	VGA connector	
5	USB upstream port	
6	USB downstream ports	

# **Monitor Specifications**

## **Flat Panel Specifications**

Screen type	Active matrix - TFT LCD	
Panel type	TN	
Screen dimensions	19 inches (19-inch viewable image size)	
Preset display area:	408.24(H)X255.15(V)	
Horizontal	408.24 mm (16.08 inches)	
Vertical	255.15 mm (10.05 inches)	
Pixel pitch	0.2835 mm	

Viewing angle	160° (vertical) typical, 160° (horizontal) typical	
Luminance output	300 CD/m²(typical)	
Contrast ratio	1000 to 1 (typical)	
Faceplate coating	Antiglare with hard-coating 3H	
Backlight	CCFL (2) edgelight system	
Response Time	5 ms typical	
Color Gamut	83%*	

 $<sup>^*\</sup>mbox{[1909W]}$  color gamut (typical) is based on CIE1976 (83%) and CIE1931 (72%) test standards.









## **Resolution Specifications**

Horizontal scan range	30 kHz to 83 kHz (automatic)
Vertical scan range	56 Hz to 75 Hz (automatic)
Optimal preset resolution	1440 X 900 at 60 Hz
Highest preset resolution	1440 x 900 at 60 Hz

### **Supported Video Modes**

480i/480p/576i/576p/720p/1080i/1080P (Supports
HDCP)









### **Preset Display Modes**

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity
				(Horizontal/Vertical)
VESA, 720 x 400	31.5	70.0	28.3	-/+
VESA, 640 x 480	31.5	60.0	25.2	-/-
VESA, 640 x 480	37.5	75.0	31.5	-/-
VESA, 800 x 600	37.9	60.3	40	+/+
VESA, 800 x 600	46.9	75.0	40	+/+
VESA, 1024 x 768	48.4	60.0	65.0	-/-
VESA, 1024 x 768	60.0	75.0	78.8	+/+
VESA, 1152 x 864	67.5	75.0	108.0	+/+
VESA, 1280 x 800	61.6	60.0	83.5	+/-
VESA, 1280 x 1024	64.0	60.0	108.0	+/+
VESA, 1280 x 1024	80.0	75.0	135.0	+/+
VESA, 1440 x 900	56.0	60.0	106.0	-/+



### **Electrical Specifications**

Video input signals	Analog RGB, 0.7 Volts +/- 5%, positive polarity at 75 ohm input impedance Digital DVI-D TMDS, 600mV for each differential line, positive polarity at 50 ohm input impedance
Synchronization input signals	Separate horizontal and vertical synchronizations, polarity-free TTL level, SOG (Composite SYNC on green)
AC input voltage/frequency/current	100 to 240 VAC/50 or 60 Hz ± 3 Hz/1.5A (Max.)
Inrush current	120 V: 30 A (Max.) 240 V: 60 A (Max.)



# **Physical Characteristics**

Connector type	15-pin D-subminiature, blue connector; DVI-D, white connector	
Signal cable type	Digital: Detachable, DVI-D, Solid pins, shipped detached from the monitor	

Flat Panel Monitor User's Guide					
	Analog: Detachable, D-Sub, 15pins, shipped attached to the monitor				
Dimensions (with stand)					
Height (Compressed)	12.39 inches (314.68 mm)				
Height (Extended)	17.13 inches (434.68 mm)				
Width	17.45 inches (442.87 mm)				
Depth	6.92 inches (175.64 mm)				
Dimensions (without stand)					
Height	11.42 inches (289.77 mm)				
Width	17.45 inches (442.87 mm)				
Depth	2.32 inches (59.00 mm)				
Stand dimensions					
Height (Compressed)	9.48 inches (240.80 mm)				
Height (Extended)	14.22 inches (360.80 mm)				
Width	9.85 inches (249.92 mm)				
Depth	6.92 inches (175.64 mm)				
Weight					
Weight with packaging	14.09 lbs (6.40 kg)				
Weight with stand assembly and cables	12.34 lbs (5.60 kg)				
Weight without stand assembly (For wall mount or VESA mount considerations - no cables)	8.25 lbs (3.74 kg)				
Weight of stand assembly	3.18 lbs (1.44 kg)				













#### **Environmental Characteristics**

Temperature			
Operating	5° to 35° C (41° to 95°F)		
Non-operating	Storage: -20° to 60° C (-4° to 140° F) Shipping: -20° to 60° C (-4° to 140° F)		
Humidity			
Operating	10% to 80% (non-condensing)		
Non-operating	Storage: 5% to 90% (non-condensing) Shipping: 5% to 90% (non-condensing)		
Altitude			
Operating	3,657.60 m (12,000 ft) max		
Non-operating	12,192 m (40,000 ft) max		
Thermal dissipation	256.08 BTU/hour (maximum)		

119.50 BTU/hour (typical)





#### **Power Management Modes**

If you have VESA's DPM<sup>TM</sup> compliance display card or software installed in your PC, the monitor can automatically reduce its power consumption when not in use. This is referred to as *Power Save* Mode\*. If the computer detects input from keyboard, mouse, or other input devices, the monitor automatically resumes functioning. The following table shows the power consumption and signaling of this automatic power saving feature:

VESA Modes	Horizontal Sync	Vertical Sync	Video	Power Indicator	Power Consumption
Normal operation	Active	Active	Active	Blue	25 W (typical)
Active-off mode	Inactive	Inactive	Blanked	Amber	Less than 1 W
Switch off	-	-	-	Off	Less than 1 W

The OSD will only function in the normal operation mode. When the menu or plus buttons are pressed in Active-off mode, one of the following messages will be displayed: Analog Input In Power Save Mode. Press Computer Power Button or Any Key on Keyboard or Move Mouse

Digital Input In Power Save Mode. Press Computer Power Button or Any Key on Keyboard or Move Mouse

Activate the computer and the monitor to gain access to the OSD.





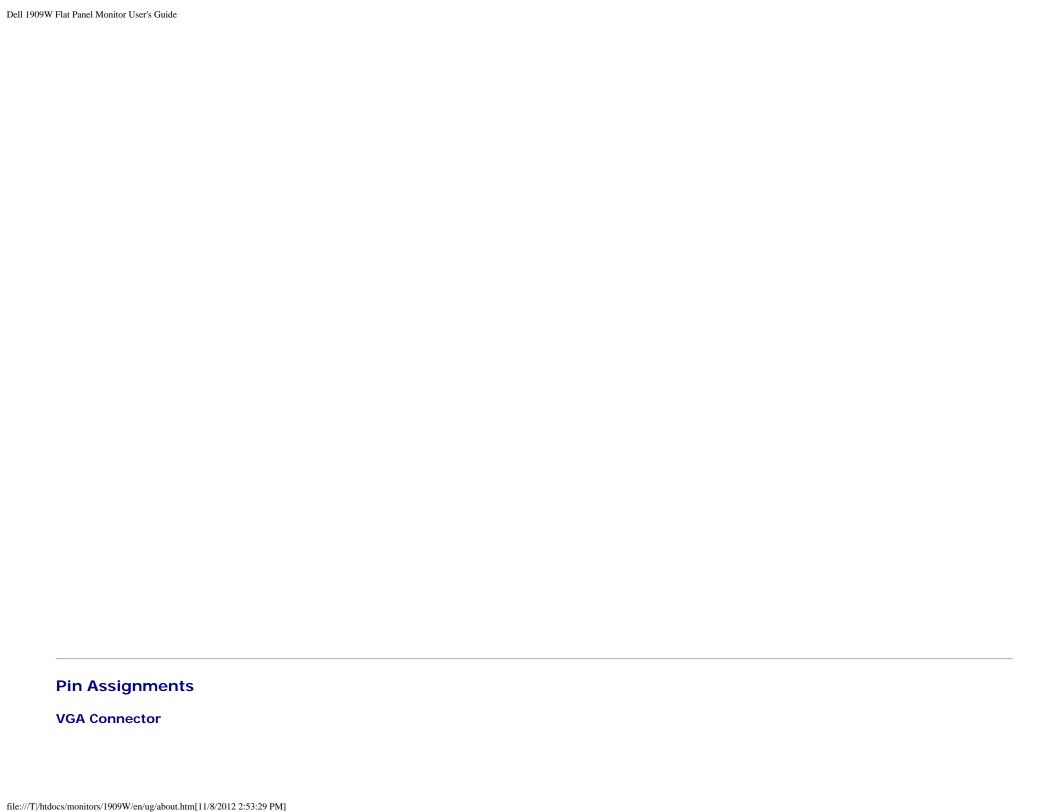
NOTE: This monitor is ENERGY STAR®-compliant as well as TCO '03 power management compatible.

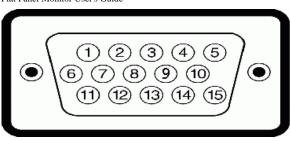
\* Zero power consumption in OFF mode can only be achieved by disconnecting the main cable from the monitor.





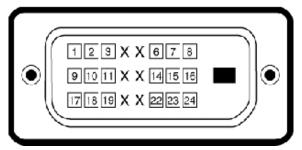






Pin Number	15-pin Side of the Connected Signal Cable
1	Video-Red
2	Video-Green
3	Video-Blue
4	GND
5	Self-test
6	GND-R
7	GND-G
8	GND-B
9	Computer 5V/3.3V
10	GND-sync
11	GND
12	DDC data
13	H-sync
14	V-sync
15	DDC clock

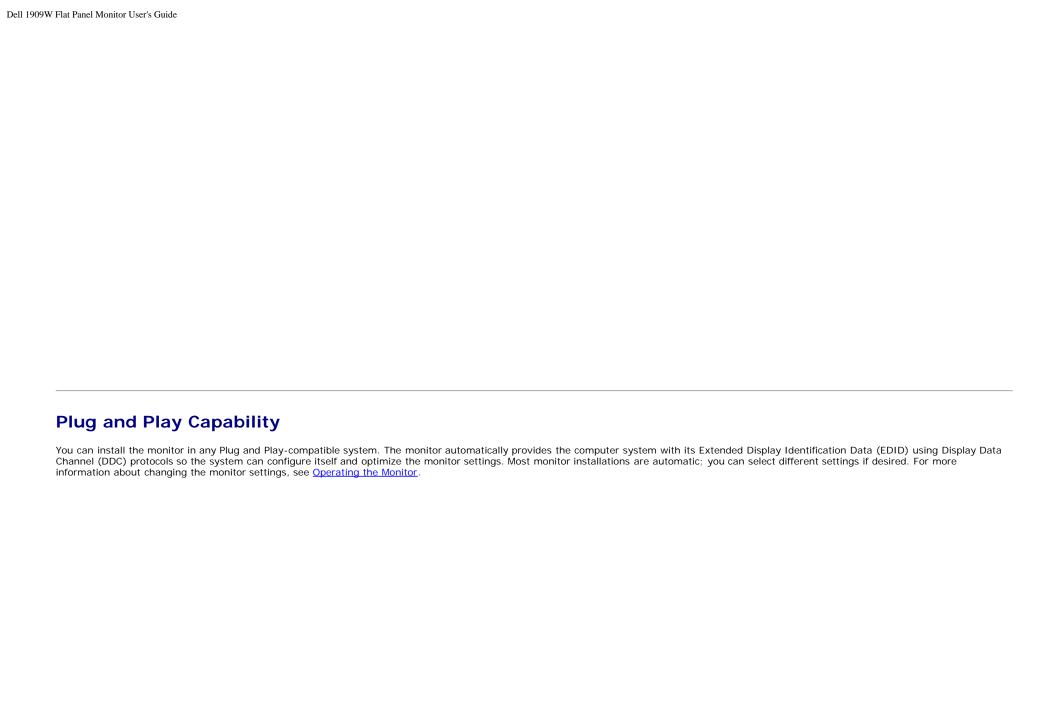
### **DVI** Connector

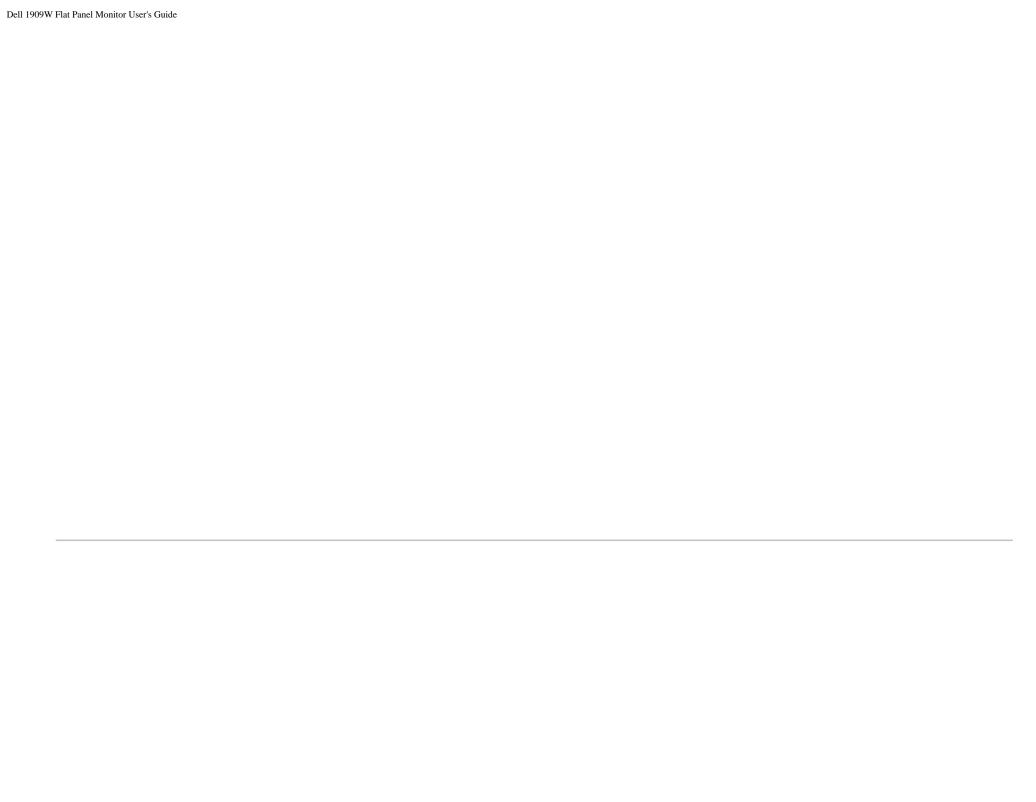


Pin Number	24-pin Side of the Connected Signal Cable	
1	TMDS RX2-	
2	TMDS RX2+	
3	TMDS Ground	

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4	Floating
5	Floating
6	DDC Clock
7	DDC Data
8	Floating
9	TMDS RX1-
10	TMDS RX1+
11	TMDS Ground
12	Floating
13	Floating
14	+5V/+3.3V power
15	Self test
16	Hot Plug Detect
17	TMDS RX0-
18	TMDS RX0+
19	TMDS Ground
20	Floating
21	Floating
22	TMDS Ground
23	TMDS Clock+
24	TMDS Clock-







# Universal Serial Bus (USB) Interface

This section gives you information about the USB ports that are available on the left side of your monitor.



NOTE: This monitor supports High-Speed Certified USB 2.0 interface

Transfer speed	Data Rate	Power Consumption
High speed	480 Mbps	2.5W (Max., each port)
Full speed	12 Mbps	2.5W (Max., each port)
Low speed	1.5 Mbps	2.5W (Max., each port)

### **USB Upstream Connector**



Pin Number	4-pin Side of the Connector	
1	DMU	
2	VCC	
3	DPU	
4	GND	

### **USB Downstream Connector**



Pin Number	4-Pin Side of the Signal Cable	
1	vcc	
2	DMD	
3	DPD	
4	GND	

#### **USB Ports**

- 1 upstream back
- · 4 downstream 2 on back; 2 on left side



NOTE: USB 2.0 functionality requires a USB 2.0-capable computer



NOTE: The monitor's USB interface works only when the monitor is on or in power save mode. If you turn off the monitor and then turn it on, the attached peripherals may take a few seconds to resume normal functionality.

#### **LCD Monitor Quality and Pixel Policy**

During the LCD monitor manufacturing process, it is not uncommon for one or more pixels to become fixed in an unchanging state. The visible result is a fixed pixel that appears as an extremely tiny dark or bright discolored spot. In almost every case, these fixed pixels are hard to see and do not detract from display quality or usability. A display with 1 to 5 fixed pixels is considered normal and within competitive standards. For more information, see Dell Support site at: support.dell.com.

#### **Maintenance Guidelines**

### **Cleaning Your Monitor**



WARNING: Read and follow the safety instructions before cleaning the monitor.



WARNING: Before cleaning the monitor, unplug the monitor power cable from the electrical outlet.

For best practices, follow the instructions in the list below while unpacking, cleaning, or handling your monitor:

- To clean your antistatic screen, lightly dampen a soft, clean cloth with water. If possible, use a special screen-cleaning tissue or solution suitable for the antistatic coating. Do not use benzene, thinner, ammonia, abrasive cleaners, or compressed air.
- · Use a lightly-dampened, warm cloth to clean the monitor. Avoid using detergent of any kind as some detergents leave a milky film on the monitor.
- If you notice white powder when you unpack your monitor, wipe it off with a cloth.
- Handle your monitor with care as darker-colored monitor may scratch and show white scuff marks more than lighter-colored monitor.
- To help maintain the best image quality on your monitor, use a dynamically changing screen saver and turn off your monitor when not in use.

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# **Setting Up the Monitor**

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- Attaching the Stand
- **Connecting the Monitor**
- Organizing Your Cables
- Attaching the Soundbar (optional)
- Removing the Stand

## **Attaching the Stand**



**NOTE**: The stand is detached when the monitor is shipped from the factory.



NOTE: This is applicable for a monitor with a stand. When the OptiPlex<sup>TM</sup> USFF 780/ OptiPlex<sup>TM</sup> SFF 980 AIO stand is bought, please refer to the respective AIO stand setup guide for set up instructions.



To attach the monitor stand:

- 1. Place the stand on a flat surface
- 2. Fit the groove on the back of the monitor to the two tabs on the upper part of the stand.
- 3. Lower the monitor so that the monitor mounting area snaps on to or locks on to the stand.

## **Connecting Your Monitor**



**WARNING:** Before you begin any of the procedures in this section, follow the <u>Safety Instructions</u>.

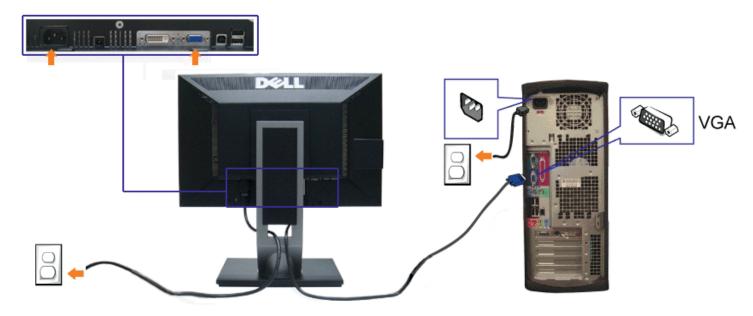
To connect your monitor to the computer:

- 1. Turn off your computer and disconnect the power cable.
- 2. Connect either the white (digital DVI-D) or the blue (analog VGA) display connector cable to the corresponding video port on the back of your computer. Do not use both cables on the same computer. Use both the cables only when they are connected to two different computers with appropriate video systems.

## Connecting the white DVI cable



Connecting the blue VGA cable



Ø

NOTE: The Graphics are used for the purpose of illustration only. Appearance of the computer may vary.

## Connecting the USB cable

After you have completed connecting the DVI/VGA cable, follow the procedure below to connect the USB cable to the computer and complete your monitor setup:

- 1. Connect the upstream USB cable (cable supplied) to the monitor upstream port and then to the appropriate USB port on your computer (see bottom view for details).
- 2. Connect USB peripherals to the downstream USB ports (side or bottom) on the monitor. (See side or bottom view for details.)
- 3. Plug the power cables for your computer and monitor into a nearby outlet.
- 4. Turn on the monitor and the computer.

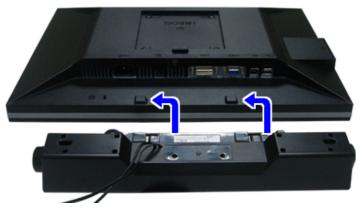
  If your monitor displays an image, installation is complete. If it does not display an image, see <u>Solving Problems</u>.
- 5. Use the cable holder on the monitor stand to organize the cables.

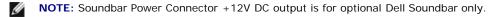
# **Organizing Your Cables**



After attaching all necessary cables to your monitor and computer, (See Connecting Your Monitor for cable attachment,) use the cable management slot to organize all cables as shown above.

# Attaching the Dell Soundbar





- 1. Working from the rear of the monitor, attach the Soundbar aligning the two slots with the two tabs along the bottom rear of the monitor.
- 2. Slide the Soundbar to the left until it snaps into place.
- 3. Connect the soundbar to the Audio Power DC-out socket (see bottom view for details).
- 4. Insert the lime-green mini stereo plug from the rear of the Soundbar into the computer's audio output jack.

# **Removing the Stand**



NOTE: To prevent scratches on the LCD screen while removing the stand, ensure that the monitor is placed on a clean surface.



NOTE: This is applicable for a monitor with a stand. When the OptiPlex<sup>TM</sup> USFF 780/ OptiPlex<sup>TM</sup> SFF 980 AIO stand is bought, please refer to the respective AIO stand setup guide for set up instructions.



#### To remove the stand:

- 1. Rotate the stand to allow access to the stand release button.
- 2. Press and hold the Stand release button.
- 3. Lift the stand up and away from the monitor.

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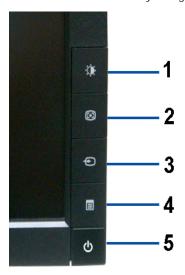
# **Operating the Monitor**

**Dell™ 1909W Flat Panel Monitor User's Guide** 

- Using the Front Panel Controls
- Using the On-Screen Display (OSD) Menu
- Setting the Maximum Resolution
- Using the Dell Soundbar (Optional)
- Using the Tilt ,Rotation
- Rotating the monitor
- Adjusting the Rotation Display Settings of Your System

## **Using the Front Panel**

Use the control buttons on the front of the monitor to adjust the characteristics of the image being displayed. As you use these buttons to adjust the controls, an OSD shows the numeric values of the characteristics as they change.



Fro	nt panel Button	Description
А	<b>D</b>	Use this button to directly access the "Brightness/Contrast" menu or to increase the values of the selected menu option.
	Brightness&Contrast	
В	<b>(+3)</b>	Use Auto Adjust to activate automatic setup/adjustment or to increase the values of the selected menu option. The following dialog appears on a black screen as the monitor self-adjusts to the current input:

	Automatic Adjust /Adjust Up	Auto Adjustment in Progress
		Auto Adjustment allows the monitor to self-adjust to the incoming video signal. After using Auto Adjustment, you can further tune your monitor by using the Pixel Clock (Coarse) and Phase (Fine) controls under Image Settings.
		NOTE: Auto Adjust does not occur if you press the button while there are no active video input signals or attached cables.
С	•	Use this button to select the input source or to decrease the values of the selected menu option. Use the Input source button to select one of the two different video signals that may be connected to your monitor:  • VGA input • DVI-D input
	Input Source Select/Adjust Down	1: Auto Detect(Analog) or 1: Auto Detect(Digital)
		2: Analog Input or 3: Digital Input ————————————————————————————————————
		If either VGA or DVI-D input is selected and both VGA and DVI-D cables are not connected, a floating dialog box as shown below appears.  Dell 1909W  or  No DVI-D Cable  Dell 1909W
D		Use the MENU button to launch the on-screen display (OSD) and select the OSD Menu. See Accessing the Menu System.
E	Menu	Use the Power button to turn the monitor on and off.
E	Power (with power light	The Blue LED indicates the monitor is on and fully functional. An amber LED indicates DPMS power save mode.
	indicator)	

## Using the On-Screen Display (OSD) Menu

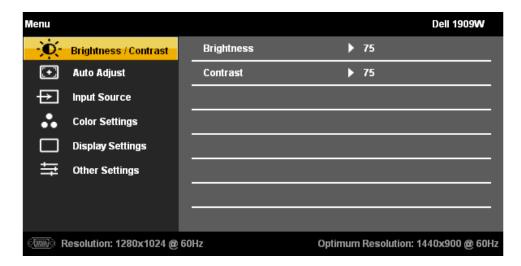
## **Accessing the Menu System**



**NOTE**: If you change the settings and then either proceed to another menu or exit the OSD menu, the monitor automatically saves those changes. The changes are also saved if you change the settings and then wait for the OSD menu to disappear.

1. Push the MENU button to launch the OSD menu and display the main menu.

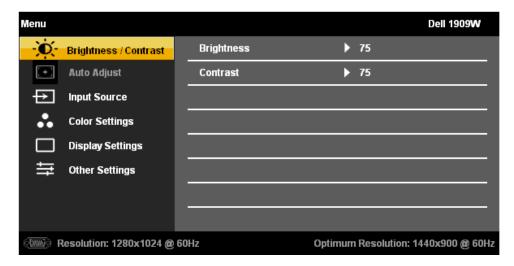
#### Main Menu for Analog (VGA) Input





or

#### Main Menu for DVI Input



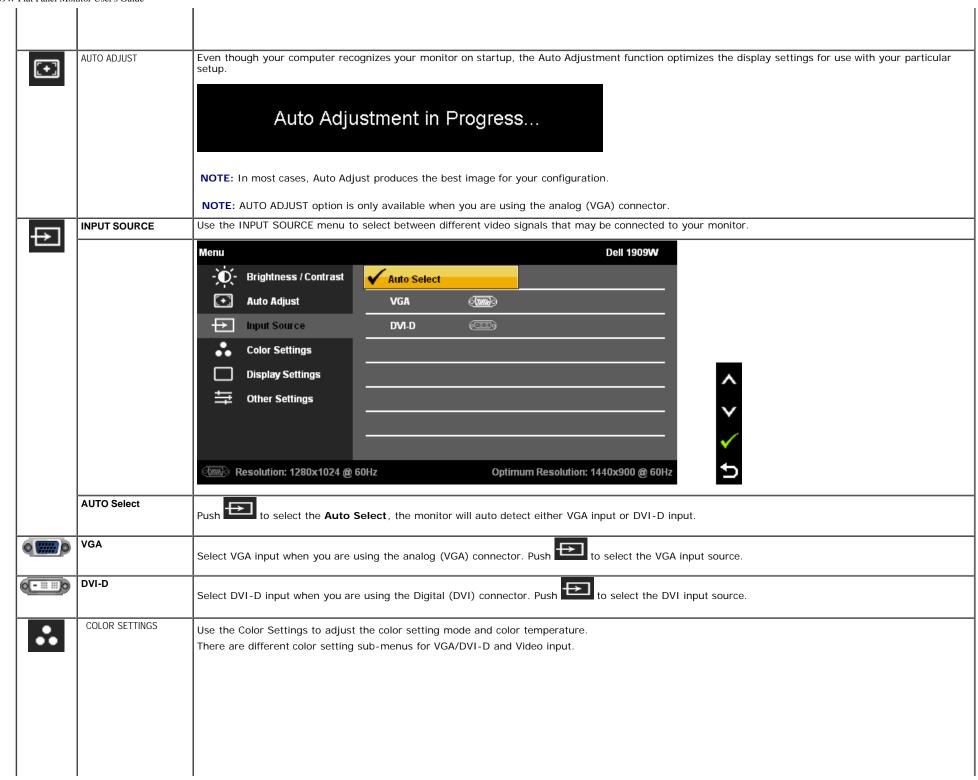


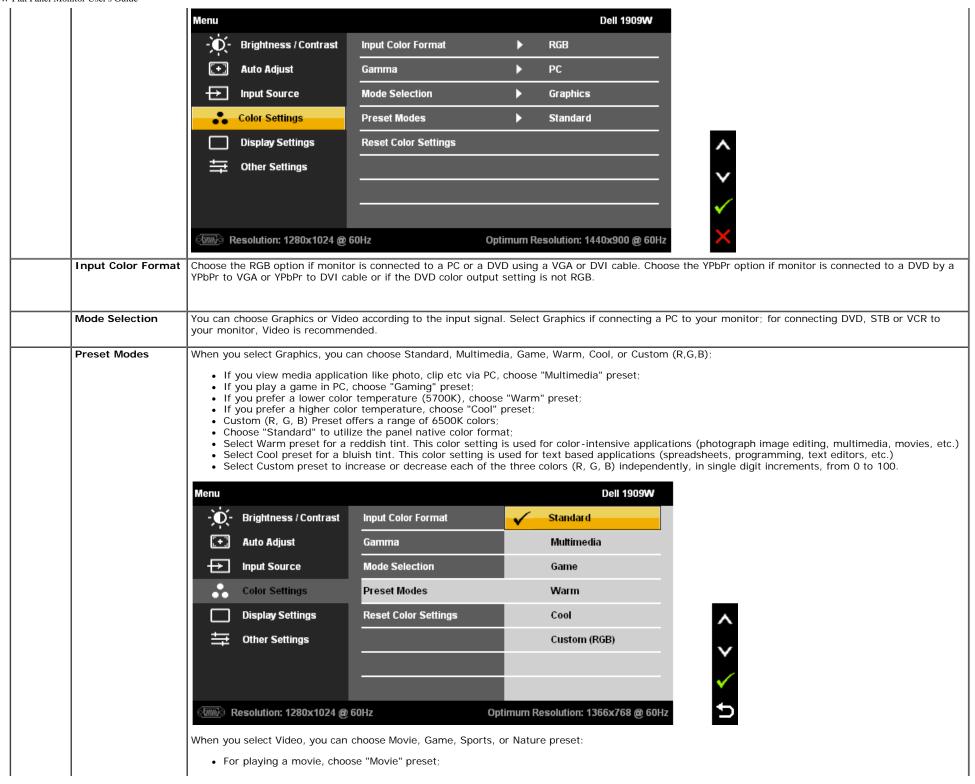


NOTE: AUTO ADJUST is only available when you use the analog (VGA) connector.

- 2. Push the options available for the monitor.
- 3. Push the MENU button once to activate the highlighted option.
- 4. Push and button to select the desired parameter.
- 5. Push MENU to enter the slide bar and then use the buttons, according to the indicators on the menu, to make your changes.
- 6. Select the "Menu/Exit" option to return to the main menu or exit the OSD menu.

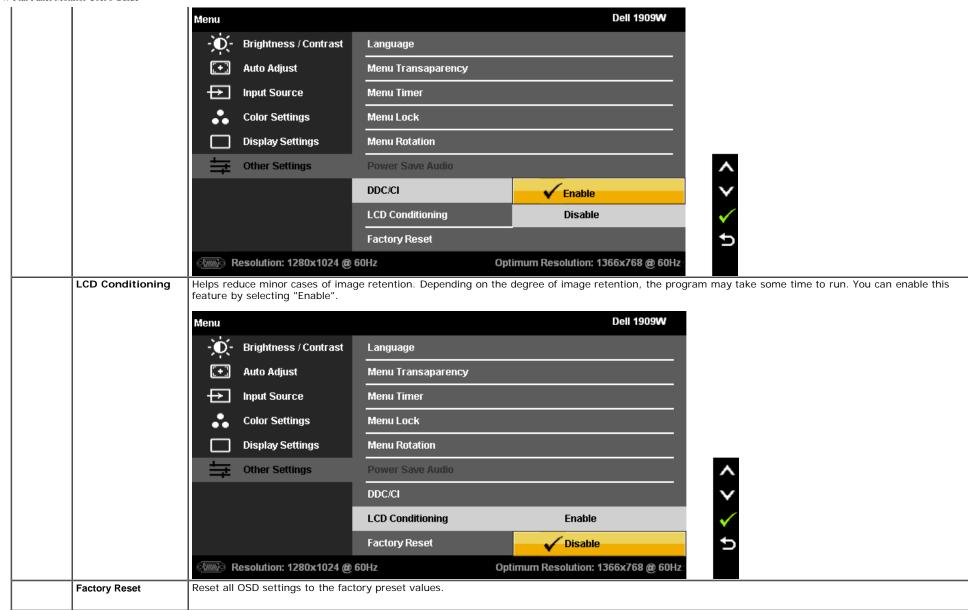
Icon	Menu and Submenus	Description	
- <b>,O</b> (-	BRIGHTNESS & CONTRAST	Use this menu to activate Brightness/Contrast adjustment.	
		To Contrast	
	Brightness	Brightness adjusts the luminance of the backlight.  Push the button to increase brightness and push the button to decrease brightness (min 0 ~ max 100).	
	Contrast	Adjust Brightness first, and then adjust Contrast only if further adjustment is necessary.  Push the button to increase contrast and push the button to decrease contrast (min 0 ~ max 100).  The Contrast function adjusts the degree of difference between darkness and lightness on the monitor screen.	





		Menu Dell 1909W			
		- D- Brightness / Contrast Wide Mode Fill			
		+ Auto Adjust Horizontal Position > 50			
		Input Source Vertical Position > 50			
		Color Settings Sharpness > 50			
		Display Settings Pixel Clock > 50			
		Reset Display Settings			
		Resolution: 1280x1024 @ 60Hz Optimum Resolution: 1440x900 @ 60Hz			
	Wide Mode	Adjust the image ratio as 4:3 or full screen.			
	Horizontal Position	Use the or buttons to adjust image left and right. Minimum is '0' (-). Maximum is '100' (+).			
	Vertical Position	Use the - or buttons to adjust image up and down. Minimum is '0' (-). Maximum is '100' (+).			
	Sharpness	This feature can make the image look sharper or softer. Use or to adjust the sharpness from '0' to '100'.			
	Pixel Clock	This feature can make the image look sharper or softer. Use or to adjust the sharpness from '0' to '100'.  The Phase and Pixel Clock adjustments allow you to adjust your monitor to your preference. These settings are accessed through the main OSD menu, by			
		selecting 'Image Settings'.			
		Use the or buttons to adjust for best image quality.			
	Phase	If satisfactory results are not obtained using the Phase adjustment, use the Pixel Clock (coarse) adjustment and then use Phase (fine), again.			
		NOTE: Pixel Clock and Phase Adjustments are only available for "VGA" input.			
	Reset Display Settings	Select this option to restore default display settings.			
⇒	OTHER SETTINGS	Select this option to adjust the settings of the OSD, such as, the languages of the OSD, the amount of time the menu remains on screen, and so on.			

	Menu			Dell 1909 <b>W</b>
	Brightness / Contrast	Language	<b>•</b>	English
	+ Auto Adjust	Menu Transparency	<b>•</b>	20
	→ Input Source	Menu Timer	<b>•</b>	20 s
	• Color Settings	Menu Lock	<b>•</b>	Unlock
	Display Settings	Menu Rotation	<b>&gt;</b>	Landscape
	Other Settings	Power Save Audio	<b>&gt;</b>	оп
		DDC/CI	<b>&gt;</b>	Enable
		LCD Conditioning	<b>&gt;</b>	Disable
		Factory Reset	•	Reset All Settings
				<b>▼</b>
	(WM) Resolution: 1280x1024 @ 6	50Hz (	ptimum Re	esolution: 1440x900 @ 60Hz
Language	Language option to set the OSD	display to one of seven lang	juages (Er	nglish, Espanol, Francais, Deutsch, Russian ,Simplified chinese or Japanese
Menu Transparency	Select this option to change the menu transparency by pressing or (Minimum: 0 ~ Maximum: 100).  OSD Hold Time: Sets the length of time the OSD will remain active after the last time you pressed a button.  Use the or buttons to adjust the slider in 5 second increments, from 5 to 60 seconds.			or (Minimum: 0 ~ Maximum: 100).
	Controls user access to adjustme	ents. When 'Lock' is selected	, no user a	adjustments are allowed. All buttons are locked except the menu butto button user directly to the OSD settings menu, with OSD Lock selected. Select "U
Menu Rotation	Rotates the OSD by 90 degrees of	counter-clockwise. Your can	adjust the	e menu according to your <u>Display Rotation</u> .
Power Save Audio	To turn on or off Audio Power du	ring Power Save mode.		
	DDC/CI (Display Data Channel/C PC. You can disable this feature I Enable this feature for best user	by selecting "Disable".		tor parameters (brightness, color balance etc) to be adjustable via softward



Note: This monitor has a build-in feature to automatically calibrate the brightness to compensate for CCFL aging.

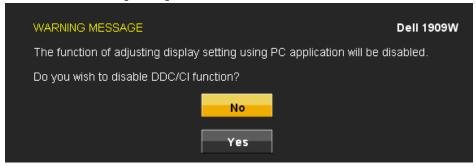
#### **OSD Warning Messages**

When the monitor does not support a particular resolution mode you will see the following message:



This means that the monitor cannot synchronize with the signal that it is receiving from the computer. See Monitor Specifications for the Horizontal and Vertical frequency ranges addressable by this monitor. Recommended mode is 1440 x 900.

You will see the following message before the DDC/CI function is disabled.

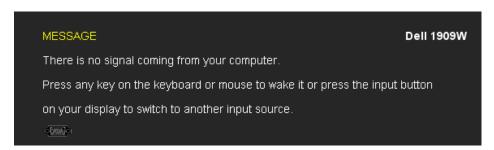


When monitor enters Power Save mode, the following message appears:



Activate the computer and wake up the monitor to gain access to the OSD

If you press any button other than the power button one of the following messages will appear depending on the selected input: VGA/DVI -D input



If either VGA or DVI-D input is selected and both VGA and DVI-D cables are not connected, a floating dialog box as shown below appears.





See Solving Problems for more information.

### **Setting the Maximum Resolution**

To set the Maximum resolution for the monitor:

In Windows XP:

- 1. Right-click on the desktop and select **Properties**.
- 2. Select the Settings tab.
- 3. Set the screen resolution to 1440 x 900.
- 4. Click OK.

In Windows Vista or Windows 7:

- 1. Right-click on the desktop and select Personalization.
- 2. Click Change Display Settings.
- 3. Move the slider-bar to the right by pressing and holding the left-mouse button and adjust the screen resolution to 1440 X900.
- 4. Click OK.

If you do not see 1440 x 900 as an option, you may need to update your graphics driver. Depending on your computer, complete one of the following procedures:

- If you have a Dell desktop or portable computer:
  - Go to support.dell.com, enter your service tag, and download the latest driver for your graphics card.
- If you are using a non-Dell computer (portable or desktop):
  - Go to the support site for your computer and download the latest graphic drivers.
  - Go to your graphics card website and download the latest graphic drivers.

#### **Using the Dell Soundbar (Optional)**

The Dell Soundbar is a stereo two channel system adaptable to mount on Dell Flat Panel Displays. The Soundbar has a rotary volume and on/off control to adjust the overall system level, a blue LED for power indication, and two audio headset jacks.



1. Power/volume control

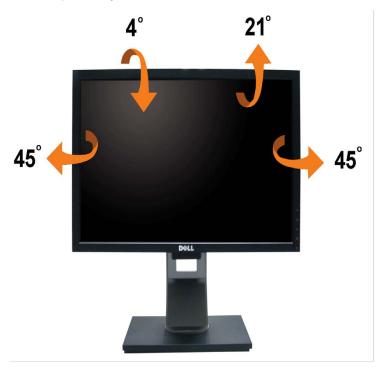
- 2. Power indicator
- 3. Headphone connectors

# Using the Tilt, Rotation

NOTE: This is applicable for a monitor with a stand. When the OptiPlex<sup>TM</sup> USFF 780/ OptiPlex<sup>TM</sup> SFF 980 AIO stand is bought, please refer to the respective AIO stand setup guide for set up instructions.

#### Tilt

With the built-in pedestal, you can tilt the monitor for the most comfortable viewing angle.



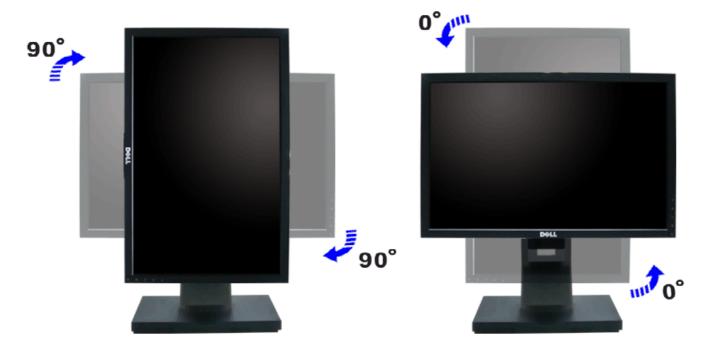


**NOTE:** The stand is detached when the monitor is shipped from the factory.

## **Rotating the Monitor**

Before you rotate the monitor, your monitor should be fully vertically extended (Vertical Extension) and fully tilted (Tilt) up to avoid hitting the bottom edge of the monitor.





NOTE: To use the Display Rotation function (Landscape versus Portrait view) with your Dell computer, you require an updated graphics driver that is not included with this monitor. To download the graphics driver, go to support.dell.com and see the Download section for Video Drivers for latest driver updates.

NOTE: When in Portrait View Mode, you may experience performance degradation in graphic-intensive applications (3D Gaming etc.)

### **Adjusting the Rotation Display Settings of Your System**

After you have rotated your monitor, you need to complete the procedure below to adjust the Rotation Display Settings of Your System.



**NOTE:** If you are using the monitor with a non-Dell computer, you need to go the graphics driver website or your computer manufacturer website for information on rotating your operating system.

To adjust the Rotation Display Settings:

- 1. Right-click on the desktop and click Properties.
- 2. Select the Settings tab and click Advanced.
- 3. If you have an ATI graphics card, select the **Rotation** tab and set the preferred rotation.

  If you have an nVidia graphics card, click the **nVidia** tab, in the left-hand column select **NVRotate**, and then select the preferred rotation.

  If you have an Intel graphics card, select the **Intel** graphics tab, click **Graphic Properties**, select the **Rotation** tab, and then set the preferred rotation.



NOTE: If you do not see the rotation option or it is not working correctly, go to support.dell.com and download the latest driver for your graphics card.

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## **Troubleshooting**

#### Dell™ 1909W Flat Panel Monitor

- Self-Test
- Common Problems
- **Product Specific Problems**
- Universal Serial Bus Specific Problems
- **Dell Soundbar Problems**

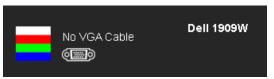
WARNING: Before you begin any of the procedures in this section, follow the Safety Instructions.

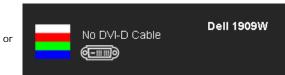
#### Self-Test

Your monitor provides a self-test feature that allows you to check whether your monitor is functioning properly. If your monitor and computer are properly connected but the monitor screen remains dark, run the monitor self-test by performing the following steps:

- 1. Turn off both your computer and the monitor.
- 2. Unplug the video cable from the back of the computer. To ensure proper Self-Test operation, remove both Digital (white connector) and the Analog (blue connector) cables from the back of computer.
- Turn on the monitor.

The floating dialog box should appear on-screen (against a black background) if the monitor cannot sense a video signal and is working correctly. While in self-test mode, the power LED remains green. Also, depending upon the selected input, one of the dialogs shown below will continuously scroll through the screen.





- 4. This box also appears during normal system operation, if the video cable becomes disconnected or damaged.
- Turn off your monitor and reconnect the video cable; then turn on both your computer and the monitor.

If your monitor screen remains blank after you use the previous procedure, check your video controller and computer, because your monitor is functioning properly.

NOTE: Self test feature check is not available for S-Video, Composite, and Component video modes.

# **Built-in Diagnostics**

Your monitor has a built-in diagnostic tool that helps you determine if the screen abnormality you are experiencing is an inherent problem with your monitor, or with your computer and video card.



MOTE: You can run the built-in diagnostics only when the video cable is unplugged and the monitor is in self-test mode.

To run the built-in diagnostics:

- 1. Ensure that the screen is clean (no dust particles on the surface of the screen).
- 2. Unplug the video cable(s) from the back of the computer or monitor. The monitor then goes into the self-test mode.
- and buttons on the front panel, simultaneously for 2 seconds. A gray screen appears. 3. Press and hold the
- 4. Carefully inspect the screen for abnormalities.
- 5. Press the button on the front panel again. The color of the screen changes to red.
- 6. Inspect the display for any abnormalities.
- 7. Repeat steps 5 and 6 to inspect the display in green, blue, and white colored screens.

The test is complete when the white screen appears. To exit, press the button again.



If you do not detect any screen abnormalities upon using the built-in diagnostic tool, the monitor is functioning properly. Check the video card and computer.

#### Common Problems

The following table contains general information about common monitor problems you might encounter and the possible solutions.

Common Symptoms	What You Experience	Possible Solutions			
No Video/Power LED off	No picture	Ensure that the video cable connecting the monitor and the computer is properly connected and secure.     Verify that the power outlet is functioning properly using any other electrical equipment.     Ensure that the power button is depressed fully.     Ensure that the correct input source is selected via the Input Source Select button.			
No Video/Power LED on	No picture or no brightness	<ul> <li>Increase brightness &amp; contrast controls via OSD.</li> <li>Perform monitor self-test feature check.</li> <li>Check for bent or broken pins in the video cable connector.</li> <li>Run the built-in diagnostics.</li> </ul>			
Poor Focus	Picture is fuzzy, blurry, or ghosting	<ul> <li>Perform Auto Adjust via OSD.</li> <li>Adjust the Phase and Pixel Clock controls via OSD.</li> <li>Eliminate video extension cables.</li> <li>Reset the monitor to Factory Settings.</li> <li>Change the video resolution to the correct aspect ration (16:10).</li> </ul>			
Shaky/Jittery Video	Wavy picture or fine movement	<ul> <li>Perform Auto Adjust via OSD.</li> <li>Adjust the Phase and Pixel Clock controls via OSD.</li> <li>Reset the monitor to Factory Settings.</li> <li>Check environmental factors.</li> <li>Relocate the monitor and test in another room.</li> </ul>			
Missing Pixels	LCD screen has spots	<ul> <li>Cycle power on-off.</li> <li>Pixel that is permanently off is a natural defect that can occur in LCD technology.</li> <li>Run the built-in diagnostics.</li> </ul>			
Stuck-on Pixels	LCD screen has bright spots	<ul> <li>Cycle power on-off.</li> <li>Pixel that is permanently off is a natural defect that can occur in LCD technology.</li> <li>Run the built-in diagnostics.</li> </ul>			
Brightness Problems	Picture too dim or too bright	<ul> <li>Reset the monitor to Factory Settings.</li> <li>Auto Adjust via OSD.</li> <li>Adjust brightness &amp; contrast controls via OSD.</li> </ul>			
Geometric Distortion	Screen not centered correctly	Reset the monitor to Factory Settings. Auto Adjust via OSD. Adjust brightness & contrast controls via OSD.  Adjust brightness & contrast controls via OSD.			
Horizontal/Vertical Lines	Screen has one or more lines	<ul> <li>NOTE: When using '2: DVI-D', the positioning adjustments are not available.</li> <li>Reset the monitor to Factory Settings.</li> <li>Perform Auto Adjust via OSD.</li> <li>Adjust Phase and Pixel Clock controls via OSD.</li> <li>Perform monitor self-test feature check and determine if these lines are also in self-test mode.</li> <li>Check for bent or broken pins in the video cable connector.</li> <li>Run the built-in diagnostics.</li> </ul>			
		NOTE: When using '2: DVI-D', the Pixel Clock and Phase adjustments are not available.			
Synchronization Problems	Screen is scrambled or appears torn	<ul> <li>Reset the monitor to Factory Settings.</li> <li>Perform Auto Adjust via OSD.</li> <li>Adjust Phase and Pixel Clock controls via OSD.</li> <li>Perform monitor self-test feature check to determine if the scrambled screen appears in self-test mode.</li> <li>Check for bent or broken pins in the video cable connector.</li> <li>Restart the computer in the safe mode.</li> </ul>			
Safety Related Issues	Visible signs of smoke or sparks	Do not perform any troubleshooting steps.     Contact Dell immediately.			
Intermittent Problems	Monitor malfunctions on & off	<ul> <li>Ensure that the video cable connecting the monitor to the computer is connected properly and is secure.</li> <li>Reset the monitor to Factory Settings.</li> <li>Perform monitor self-test feature check to determine if the intermittent problem occurs in self-test mode.</li> </ul>			
Missing Color	Picture missing color	<ul> <li>Perform monitor self-test feature check.</li> <li>Ensure that the video cable connecting the monitor to the computer is connected properly and is secure.</li> <li>Check for bent or broken pins in the video cable connector.</li> </ul>			
Wrong Color	Picture color not good	<ul> <li>Change the Color Setting Mode in the Color Settings OSD to Graphics or Video depending on the application.</li> <li>Try different Color Preset Settings in Color Settings OSD. Adjust R/G/B value in Color Settings OSD if the Color Management is turned off.</li> <li>Change the Input Color Format to PC RGB or YPbPr in the Advance Setting OSD.</li> <li>Run the built-in diagnostics.</li> </ul>			
Image retention from a static image left on the monitor for a long period of time	Faint shadow from the static image displayed appears on the screen	<ul> <li>Use the Power Management feature to turn off the monitor at all times when not in use (for more information, see <u>Power Management Modes</u>).</li> <li>Alternatively, use a dynamically changing screensaver.</li> </ul>			

# **Product Specific Problems**

Specific Symptoms	What You Experience	Possible Solutions
Screen image is too small	Image is centered on screen, but does not fill entire viewing area	<ul> <li>Check the Scaling Ratio setting in Image Setting OSD</li> <li>Reset the monitor to Factory Settings.</li> </ul>
Cannot adjust the monitor with the buttons on the front panel	OSD does not appear on the screen	Turn off the monitor, unplug the power cord, plug back, and then turn on the monitor.
controls are pressed	No picture, the LED light is green. When you press "+", "-" or "Menu" key, the message "No S-Video input signal", or "No Composite input signal", or "No Component input signal" appears	<ul> <li>Check the signal source. Ensure the Computer is not in the power saving mode by moving the mouse or pressing any key on the keyboard.</li> <li>Check to make sure Video Source to S-Video, Composite or Component is powered and playing video media.</li> <li>Check whether the signal cable is plugged in properly. Re-plug the signal cable if necessary.</li> <li>Reset the computer or video player.</li> </ul>
The picture does not fill the entire screen.	The picture cannot fill the height or width of the screen	<ul> <li>Due to different video formats (aspect ratio) of DVDs, the monitor may display in full screen.</li> <li>Run the built-in diagnostics.</li> </ul>



NOTE: When choosing DVI-D mode, the Auto Adjust function is not available.

# Universal Serial Bus (USB) Specific Problems

Specific Symptoms	What You Experience	Possible Solutions
USB interface is not working	USB peripherals are not working	<ul> <li>Check that your monitor is turned ON.</li> <li>Reconnect the upstream cable to your computer.</li> <li>Reconnect the USB peripherals (downstream connector).</li> <li>Switch off and then turn on the monitor again.</li> <li>Reboot the computer.</li> <li>Some USB devices like external portable HDD require higher electric current; connect the device directly to the computer system.</li> </ul>
High Speed USB 2.0 interface is slow.	High Speed USB 2.0 peripherals working slowly or not working at all	<ul> <li>Check that your computer is USB 2.0-capable.</li> <li>Some computers have both USB 2.0 and USB 1.1 ports. Ensure that the correct USB port is used.</li> <li>Reconnect the upstream cable to your computer.</li> <li>Reconnect the USB peripherals (downstream connector).</li> <li>Reboot the computer.</li> </ul>

## **Dell™ Soundbar Problems**

Common Symptoms	What You Experience	Possible Solutions
No Sound	No power to Soundbar - the power indicator is off	<ul> <li>Turn the Power/Volume knob on the Soundbar clockwise to the middle position; check if the power indicator (green LED) on the front of the Soundbar is illuminated.</li> <li>Confirm that the power cable from the Soundbar is plugged into the adaptor.</li> </ul>
No Sound	Soundbar has power - power indicator is on	<ul> <li>Plug the audio line-in cable into the computer's audio out jack.</li> <li>Set all Windows volume controls to their maximum</li> <li>Play some audio content on the computer (i.e. audio CD, or MP3).</li> <li>Turn the Power/Volume knob on the Soundbar clockwise to a higher volume setting.</li> <li>Clean and reseat the audio line-in plug.</li> <li>Test the Soundbar using another audio source (i.e.portable CD player).</li> </ul>
Distorted Sound	Computer's sound card is used as the audio source	<ul> <li>Clear any obstructions between the Soundbar and the user.</li> <li>Confirm that the audio line-in plug is completely inserted into the jack of the sound card.</li> <li>Set all Windows volume controls to their midpoints.</li> <li>Decrease the volume of the audio application.</li> <li>Turn the Power/Volume knob on the Soundbar counter-clockwise to a lower volume setting.</li> <li>Clean and reseat the audio line-in plug.</li> <li>Troubleshoot the computer's sound card.</li> <li>Test the Soundbar using another audio source (i.e. portable CD player, MP3 player).</li> </ul>
Distorted Sound	Other audio source is used	<ul> <li>Clear any obstructions between the Soundbar and the user.</li> <li>Confirm that the audio line-in plug is completely inserted into the jack of the audio source.</li> <li>Decrease the volume of the audio source.</li> <li>Turn the Power/Volume knob on the Soundbar counter-clockwise to a lower volume setting.</li> <li>Clean and reseat the audio line-in plug.</li> </ul>

Unbalanced Sound Output	Sound from only one side of Soundbar	Clear any obstructions between the Soundbar and the user. Confirm that the audio line-in plug is completely inserted into the jack of the sound card or audio source. Set all Windows audio balance controls (L-R) to their midpoints. Clean and reseat the audio line-in plug. Troubleshoot the computer's sound card. Test the Soundbar using another audio source (i.e. portable CD player).
Low Volume	Volume is too low	<ul> <li>Clear any obstructions between the Soundbar and the user.</li> <li>Turn the Power/Volume knob on the Soundbar clockwise to the maximum volume setting.</li> <li>Set all Windows volume controls to their maximum.</li> <li>Increase the volume of the audio application.</li> <li>Test the Soundbar using another audio source (i.e. portable CD player, MP3 player).</li> </ul>

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# **Appendix**

Dell™ 1909W Flat Panel Monitor User's Guide

- Safety Instructions
- FCC Notice (U.S. Only) and Other Regulatory Information
- Contacting Dell



# **⚠WARNING: Safety Instructions**



WARNING: Use of controls, adjustments, or procedures other than those specified in this documentation may result in exposure to shock, electrical hazards, and/or mechanical hazards.

For information on safety instructions, see the Product Information Guide.

# FCC Notices (U.S. Only) and Other Regulatory Information

For FCC notices and other regulatory information, see the regulatory compliance website located at <a href="www.dell.com\regulatory">www.dell.com\regulatory</a> compliance.

### **Contacting Dell**

For customers in the United States, call 800-WWW-DELL (800-999-3355).



NOTE: If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product catalog.

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

- Visit support.dell.com
- Verify your country or region in the Choose A Country/Region drop-down menu at the bottom of the page.
- 3. Click Contact Us on the left side of the page.
- Select the appropriate service or support link based on your need
- Choose the method of contacting Dell that is convenient for you.

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